

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059172

Luminaire Tested: S123RDR-S340D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059172
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D830-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

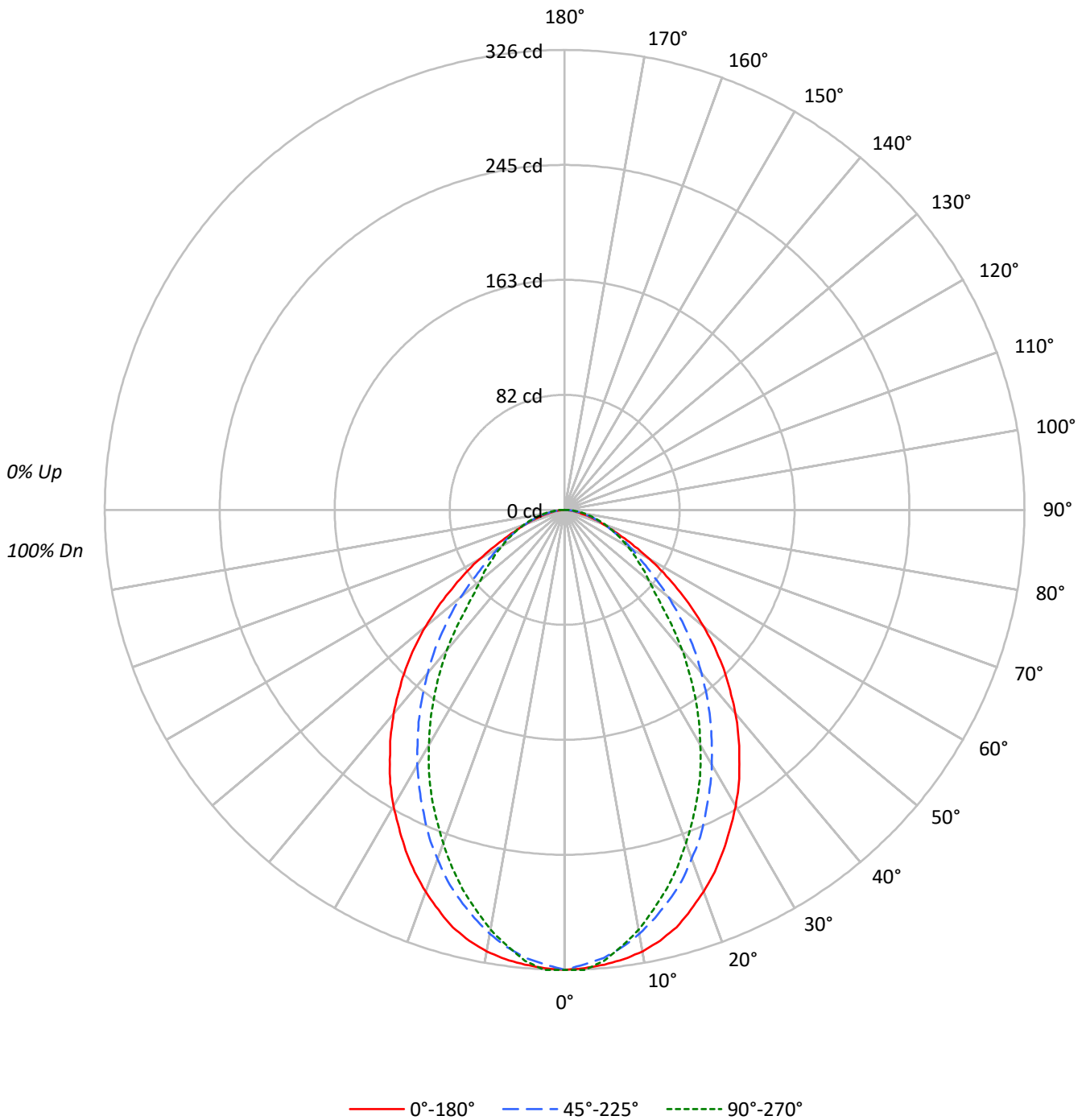
Lumens per Lamp: N/A
Luminaire Lumens: 570.1 lumens
Efficiency: N/A
Efficacy: 45.6 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52				
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35				
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3828	3828	3828
5°	3814	3759	3783
10°	3789	3639	3602
15°	3725	3482	3387
20°	3599	3290	3143
25°	3452	3067	2893
30°	3288	2831	2609
35°	3095	2577	2308
40°	2889	2312	1988
45°	2649	2043	1632
50°	2347	1754	1418
55°	1998	1468	1300
60°	1630	1280	1205
65°	1242	1131	1123
70°	968	1009	1051
75°	780	907	975
80°	582	744	899
85°	323	472	795

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2649 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.3	5.3
10°-20°	81.4	14.3
20°-30°	110.7	19.4
30°-40°	114.7	20.1
40°-50°	96.8	17.0
50°-60°	68.7	12.0
60°-70°	42.0	7.4
70°-80°	20.9	3.7
80°-90°	4.7	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	222.3	39.0
0°-40°	337.1	59.1
0°-60°	502.5	88.1
0°-90°	570.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	570.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	326	326	326	326	326	
5°	324	324	319	321	321	31
15°	306	300	286	281	279	86
25°	266	255	237	228	223	122
35°	216	199	180	167	161	135
45°	160	143	123	106	98	122
55°	98	87	72	65	64	88
65°	45	43	41	41	40	46
75°	17	18	20	21	22	19
85°	2	3	4	5	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	326.0	326.0	326.0	326.0	326.0
2.5°	325.2	325.6	322.5	326.0	326.4
5°	323.6	323.6	318.9	320.9	320.9
7.5°	321.3	320.5	312.7	312.7	311.9
10°	317.8	315.4	305.2	303.3	302.1
12.5°	312.7	308.7	296.2	292.7	290.3
15°	306.4	300.5	286.4	281.3	278.6
17.5°	297.4	291.5	275.8	268.8	265.6
20°	288.0	279.4	263.3	256.2	251.5
22.5°	277.8	266.8	251.2	242.5	237.4
25°	266.4	254.7	236.7	228.0	223.3
27.5°	254.3	241.4	222.9	213.1	208.4
30°	242.5	227.6	208.8	197.9	192.4
32.5°	230.0	213.1	193.9	182.6	177.1
35°	215.9	199.4	179.8	167.3	161.0
37.5°	202.6	185.7	165.3	152.0	145.0
40°	188.5	171.6	150.8	137.1	129.7
42.5°	173.6	157.5	137.1	121.1	114.0
45°	159.5	142.6	123.0	106.2	98.3
47.5°	144.2	128.5	109.3	92.1	86.6
50°	128.5	114.0	96.0	80.3	77.6
52.5°	113.2	101.1	82.7	72.5	71.3
55°	97.6	87.4	71.7	65.4	63.5
57.5°	83.1	75.6	61.5	58.4	57.6
60°	69.4	63.1	54.5	52.5	51.3
62.5°	56.0	52.5	47.4	46.6	45.8
65°	44.7	43.1	40.7	40.7	40.4
67.5°	35.3	35.3	34.9	35.7	35.3
70°	28.2	28.6	29.4	30.2	30.6
72.5°	22.3	23.5	24.3	25.5	25.9
75°	17.2	18.4	20.0	20.8	21.5
77.5°	12.5	13.7	15.3	16.5	17.2
80°	8.6	9.4	11.0	12.5	13.3
82.5°	5.5	5.9	7.1	8.6	9.4
85°	2.4	2.7	3.5	5.1	5.9
87.5°	0.0	0.0	0.4	1.6	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)